

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

In the Matter of )  
 )  
GARMIN INTERNATIONAL, INC. )  
 )  
Request for Waiver of Sections 95.29(f)(1), )  
95.119(a)(1), 95.181(a), 95.183(a)(4), and )  
95.631(a) and (f) of the Commission's Rules to )  
Authorize Manufacture, Sale, and Use of GPS )  
Transmission Enhanced GMRS Units )

**ORDER**

**Adopted: December 23, 2008**

**Released: December 24, 2008**

By the Deputy Chief, Mobility Division, Wireless Telecommunications Bureau:

**I. INTRODUCTION**

1. In this *Order*, we consider a request to extend a waiver of the General Mobile Radio Service (GMRS) rules permitting Garmin International, Inc. (Garmin) to market GMRS transceivers with the capability of transmitting Global Positioning System (GPS) coordinates as non-voice data. In 2004, the Public Safety and Critical Infrastructure Division (PSCID),<sup>1</sup> Wireless Telecommunications Bureau (Bureau) granted Garmin a two-year conditional waiver of Sections 95.29(f)(1), 95.119(a)(1), 95.181(a), 95.183(a)(4), and 95.631(a) and (f) of the Commission's Rules.<sup>2</sup> In 2006, the Bureau's Mobility Division (Division) granted a two-year extension of the waiver until December 29, 2008.<sup>3</sup> On August 6, 2008, Garmin requested a further extension.<sup>4</sup> For the reasons stated below, we grant Garmin's 2008 Extension Petition. Garmin's conditional waiver is now extended until December 29, 2010, under the same terms and conditions as the initial waiver.

<sup>1</sup> Pursuant to a Commission reorganization effective September 25, 2006, certain duties of the Public Safety and Critical Infrastructure Division were assumed by the Mobility Division. *See* Establishment of the Public Safety and Homeland Security Bureau, *Order*, 21 FCC Rcd 10867 (2006).

<sup>2</sup> *See* Garmin International, Inc., *Order*, 20 FCC Rcd 982 (WTB PSCID 2004) (2004 *Order*). The Division granted Garmin a waiver of the GMRS rules that (1) require the transmission of station identification information following every communication or series of communications, (2) allow the transmission of voice type emissions only, (3) relate to permissible GMRS communications, (3) limit the types of emissions and data a GMRS transmitter may transmit, and (4) prohibit coded messages. *Id.*; *see also* 47 C.F.R. §§ 95.29(f)(1), 95.119(a)(1), 95.181(a), 95.183(a)(4), 95.631(a), (f).

<sup>3</sup> *See* Garmin International, Inc., *Order*, 21 FCC Rcd 15072 (WTB MD 2006) (2006 *Order*).

<sup>4</sup> Petition for Extension of Waiver filed by Garmin International, Inc. on Aug. 6, 2008 (2008 Extension Petition).

## II. BACKGROUND

2. The Commission adopted rules establishing the future GMRS over fifty years ago as a short-distance two-way land mobile radio service available for communications that facilitate personal or business activities of licensees and their immediate family members.<sup>5</sup> In 1988, the Commission amended the GMRS rules to provide flexibility to the individual user and limit eligibility for new GMRS licenses to individuals.<sup>6</sup> In 1996, the Commission established the Family Radio Service (FRS) as a very short range, two-way voice personal radio service that provides an affordable and convenient means of communications among small groups of persons, including families, with minimal regulation.<sup>7</sup> The FRS shares seven frequencies in the 462 MHz band with the GMRS and has seven channels that are offset from GMRS channels in the 467 MHz band.<sup>8</sup>

3. In 2000, Garmin, a designer and manufacturer of consumer electronic devices, requested a waiver of the FRS rules to allow it to manufacture standard FRS voice communication radios incorporating an enhancement that would permit transmission of GPS location information.<sup>9</sup> On September 29, 2000, the Bureau's Public Safety and Private Wireless Division (PSPWD)<sup>10</sup> granted Garmin a partial waiver of Sections 95.193(b) and 95.631(d) of the Commission's Rules to allow it to manufacture and market transceivers capable of transmitting GPS location information on FRS channels.<sup>11</sup> Under its waiver grant, PSPWD permitted Garmin to receive FCC certification of a FRS unit that would permit users to transmit GPS location information using emission type F2D in a digital data burst of not

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<sup>5</sup> GMRS began as the Class A Service in the Citizens Radio Service in 1949. Creation of an Additional Personal Radio Service, *Notice of Inquiry*, PR Docket 79-140, 72 F.C.C.2d 453, 454 ¶ 3 (1979); Creation of a New Class of Citizens Radio Service and the Reallocation of Frequencies between 224 MHz and 225 MHz in the Band 220-225 MHz now Allocated for Shared Use by Stations in the Amateur Radio Service and Government Radiolocation Stations for that Purpose, *Notice of Inquiry and Notice of Proposed Rulemaking*, Docket No. 19759, 41 F.C.C.2d 147, 149 ¶ 6 (1973). In 1976, the Commission redesignated the Citizens Radio Service as the Personal Radio Services and redesignated the Class A Service as the GMRS. Revision of Operating Rules for Class D Stations in the Citizens Radio Service, Docket 20120, *Third Report and Order*, 63 F.C.C.2d 32, 32-33 ¶ 4 (1976); *see also* Amendment of Subparts A and E of Part 95 to Improve the General Mobile Radio Service (GMRS), *Report and Order*, PR Docket No. 87-265, 3 FCC Rcd 6554, 6554 ¶ 3 (1988) (*GMRS R&O*); 47 C.F.R. §§ 95.1(a), 95.181.

<sup>6</sup> *GMRS R&O*, 3 FCC Rcd at 6554 ¶ 1.

<sup>7</sup> *See* Amendment of Part 95 of the Commission's Rules to Establish a Very Short Distance Two-way Voice Radio Service, *Report and Order*, WT Docket No. 95-102, 11 FCC Rcd 12977, 12977 ¶ 2, 12983 ¶ 17, 12984 ¶ 19 (1996).

<sup>8</sup> Specifically, FRS channels 1-7 are also GMRS frequencies and FRS channels 8-14 are offset from GMRS frequencies. *Compare* 47 C.F.R. § 95.621 (GMRS frequencies) *with* 47 C.F.R. § 95.627 (FRS frequencies).

<sup>9</sup> Garmin International, Inc., *Order*, 15 FCC Rcd 19143, 19145 ¶ 5 (WTB PSPWD 2000) (*2000 Order*) (citing Letter from Garmin International, Inc. to D'wana Terry, Chief, Public Safety and Private Wireless Division, Wireless Telecommunications Bureau, Federal Communications Commission (dated Aug. 28, 2000)).

<sup>10</sup> The Commission reorganized the Wireless Telecommunications Bureau effective November 13, 2003, and the relevant duties of the Public Safety and Private Wireless Division were assumed by the Public Safety and Critical Infrastructure Division. *See* Reorganization of the Wireless Telecommunications Bureau, *Order*, 18 FCC Rcd 25414, 25414 ¶ 2 (2003).

<sup>11</sup> *See 2000 Order*, 15 FCC Rcd at 19147 ¶¶ 10-11.

more than one second.<sup>12</sup> Later that year, Garmin filed a petition for rulemaking seeking to amend the Commission's Rules essentially to codify the terms of the waiver.<sup>13</sup> In 2003, the Commission amended its rules to permit FRS transceivers to transmit GPS location information (including automatic responses to interrogation -- polling -- from other units) and user-generated text messages.<sup>14</sup>

4. Later in 2003, Garmin requested a waiver of Sections 95.29(f)(1), 95.119(a)(1), 95.181(a), 95.183(a)(4), and 95.631(a) and (f) of the Commission's Rules.<sup>15</sup> Garmin sought a waiver of these rules in order to receive FCC certification for a GMRS transceiver that is capable of transmitting F2D emissions to transmit location information derived from the GPS, and user-generated text messages.<sup>16</sup> Garmin argued that granting the waiver would allow it to extend to GMRS licensees the public safety benefits of the location positioning technology that FRS users enjoy.<sup>17</sup> Similar to the FRS radios that Garmin manufactures, the proposed units would allow GMRS users to transmit text or location data to other GMRS users by manual action or command, and would automatically transmit GPS-derived location data when polled by another unit, with the location of the transmitting unit displayed on the map of the receiving unit.<sup>18</sup>

5. Later that year, Garmin filed a petition for rulemaking seeking to modify the GMRS rules to mirror the FRS rules adopted by the Commission earlier.<sup>19</sup> In 2004, PSCID granted Garmin a two-year waiver to manufacture and market GMRS transceivers capable of transmitting GPS location information on GMRS channels, subject to all of the conditions for transmitting location data and text in the FRS.<sup>20</sup> In

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<sup>12</sup> *Id.* at 19147-48 ¶ 10. Emissions are designated by an alphanumeric code that indicates the type of modulation of the main carrier, nature of the signal(s) modulating the main carrier, and the type of information to be transmitted. *See* 47 C.F.R. § 2.201(b). F2D is a type of frequency modulated telemetry emission. *See* 47 C.F.R. § 2.201(e).

<sup>13</sup> *See* Garmin International, Inc., Petition for Rulemaking, RM 10070 (filed Dec. 26, 2000). The Commission sought comment on Garmin's Petition for Rulemaking in 2001. *See* Garmin International, Inc., Amendment of Sections 95.193(a) and 95.631(d) to Authorize Manufacture, Sale and Use of GPS Transmission Enhanced Family Radio Service Units, and Amendment of Sections 95.193(a), 95.193(b), and 95.631(d) of the Commission's Rules in the Family Radio Service, *Notice of Proposed Rulemaking*, WT Docket No. 01-339, 16 FCC Rcd 22876 (2001).

<sup>14</sup> *See* Garmin International, Inc., Amendment of Sections 95.193(a) and 95.631(d) to Authorize Manufacture, Sale and Use of GPS Transmission Enhanced Family Radio Service Units, and Amendment of Sections 95.193(a), 95.193(b), and 95.631(d) of the Commission's Rules in the Family Radio Service, *Report and Order*, WT Docket No. 01-339, 18 FCC Rcd 2349 (2003).

<sup>15</sup> *See* Letter from Garmin International, Inc. to D'wana Terry, Chief, Public Safety and Private Wireless Division, Wireless Telecommunications Bureau, Federal Communications Commission (dated May 15, 2003).

<sup>16</sup> *Id.*

<sup>17</sup> *2004 Order*, 20 FCC Rcd at 984 ¶ 6.

<sup>18</sup> *Id.*

<sup>19</sup> *See* Garmin International, Inc., Petition for Rulemaking, RM-10762, at 4 (filed July 22, 2003) (2003 Petition for Rulemaking). The Commission placed the Garmin 2003 Petition for Rulemaking on public notice on August 6, 2003. *See* Consumer and Governmental Affairs Bureau Reference Information Center Petition for Rulemaking, *Public Notice*, Report No. 2619 (Aug. 6, 2003). The Commission received seven comments and one reply comment during the pleading cycle and one *ex parte* after the pleading cycle. This petition will be addressed in a separate proceeding.

<sup>20</sup> *2004 Order*, 20 FCC Rcd at 986 ¶ 13. The Division also conditioned the waiver upon the resolution of the 2003 Petition for Rulemaking. *Id.*

effect, PSCID extended to GMRS licensees the public safety benefits of the location positioning technology that is available to FRS users.<sup>21</sup>

6. In 2006, Garmin sought an extension of the relief afforded in the *2004 Order* for an additional two years pending resolution of the 2003 Petition for Rulemaking.<sup>22</sup> Garmin asserted that granting the extension would provide authority for Garmin to continue marketing equipment that had saved, and would continue to save, lives.<sup>23</sup> Moreover, Garmin alleged that due to the efficiency of its non-voice data transmissions, it had not received any reports of harmful interference from the operation of its equipment.<sup>24</sup> Later that year, the Division granted Garmin a two-year extension of the waiver to manufacture and market GMRS transceivers capable of transmitting GPS location information on GMRS channels, subject to the same conditions as the 2004 waiver.<sup>25</sup> The Division concluded that granting the extension of the waiver would serve the underlying purpose of the GMRS rules to be a flexible, efficient and effective personal communications service.<sup>26</sup>

7. In the instant petition, Garmin seeks a further two-year extension pending resolution of the 2003 Petition for Rulemaking. Garmin asserts that granting the extension would provide authority for Garmin to continue marketing equipment that has saved, and will continue to save, lives.<sup>27</sup> Moreover, Garmin alleges that due to the efficiency of its non-voice data transmissions, it has not received any reports of harmful interference from the operation of its equipment.<sup>28</sup>

### III. DISCUSSION

8. As PSCID stated in the *2004 Order*, application of the rules to the instant case would frustrate the underlying purpose of the GMRS rules, and a waiver is in the public interest.<sup>29</sup> Although Garmin's technology did not exist at the time the Commission substantially revised the GMRS rules in 1988, we note that the Commission did intend GMRS to be a flexible, efficient and effective personal communications service.<sup>30</sup> The Commission limited eligibility for new GMRS system licenses to individuals to focus the use of the limited number of GMRS channels towards the needs of the personal user.<sup>31</sup> The Commission's stated goal was to "enhance the GMRS for the personal user."<sup>32</sup> Therefore,

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<sup>21</sup> *Id.* at 982 ¶ 9.

<sup>22</sup> See Petition for Extension of Waiver filed by Garmin International, Inc. on Apr. 6, 2006.

<sup>23</sup> *Id.* at 2 and Exhibit One.

<sup>24</sup> *Id.* at 2.

<sup>25</sup> See *2006 Order*, 21 FCC Rcd at 15075 ¶ 6 (extending Garmin's initial waiver until December 29, 2008).

<sup>26</sup> *Id.*

<sup>27</sup> See 2008 Extension Petition at 2-3, 5-12.

<sup>28</sup> *Id.* at 3-4.

<sup>29</sup> *2004 Order*, 20 FCC Rcd at 984 ¶ 8.

<sup>30</sup> *GMRS R&O*, 3 FCC Rcd at 6554 ¶ 1.

<sup>31</sup> *Id.* at 6555 ¶ 7.

consistent with the Commission's goals and intentions, and as requested by Garmin, the Commission is considering broadening the scope of the GMRS rules in a manner that would encompass location technology and text messaging.<sup>33</sup> We continue to believe there is potential benefit in doing so. For example, Garmin has persuaded us that personal safety could be enhanced if GMRS users could ascertain the location of GMRS-equipped family or group members. Granting the further extension of the waiver will serve the underlying purpose of the GMRS rules to be a flexible, efficient and effective personal communications service. Accordingly, we conclude that the public interest factors raised by Garmin merit further extension of the initial waiver, under the same terms and conditions thereof, pending resolution of the 2003 Petition for Rulemaking.

#### IV. CONCLUSION

9. Garmin has satisfied the Commission's waiver criteria, thus warranting a further two-year extension of the waiver, subject to the terms and conditions of the initial waiver. Accordingly, we grant an extension of the waiver permitting Garmin to manufacture and market GMRS transceivers capable of transmitting GPS location information on GMRS channels until December 29, 2010, subject to all of the conditions for transmitting location data and text in the FRS<sup>34</sup> and the following additional conditions and requirements set forth in the *2004 Order*<sup>35</sup>:

--Garmin must design the units it proposes to manufacture such that the mobile units capable of transmitting text and GPS location data have integrated (*i.e.*, non-detachable) antennas.

--Garmin must design the units it proposes to manufacture such that transmission of text and GPS location data is limited to 462 MHz GMRS channels, as specified in Section 95.29(a) and (f), which channels are not repeater input frequencies.

--Garmin must design the units it proposes to manufacture such that transmission of text and GPS location data is limited to an authorized bandwidth of no more than 12.5 kHz.

--Garmin must design the units it proposes to manufacture such that a unit cannot automatically (*i.e.*, without manual action or command) poll other units to determine their location based on GPS-derived location information.

--Grant of this waiver is subject to the resolution of Garmin's pending petition for rulemaking, RM-10762.

--We may immediately terminate the waiver if harmful interference<sup>36</sup> is reported to the Commission.

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<sup>32</sup> *Id.* at 6554 ¶ 2.

<sup>33</sup> *See supra* note 19.

<sup>34</sup> *See* 47 C.F.R. § 95.193(b)(2).

<sup>35</sup> *See 2004 Order*, 20 FCC Rcd at 986 ¶ 13; *see also 2006 Order*, 21 FCC Rcd at 15075-76 ¶ 7.

<sup>36</sup> Harmful interference for purposes of this waiver will be considered interference which endangers the functioning of a radionavigation service or of other safety services or seriously degrades, obstructs or repeatedly interrupts another radiocommunication service operating in accordance with the Commission's Rules or the international *Radio Regulations*.

**V. ORDERING CLAUSES**

10. Accordingly, IT IS ORDERED that pursuant to Section 4(i) of the Communications Act of 1934, as amended, 47 U.S.C. § 154(i), and Section 1.925 of the Commission's Rules, 47 C.F.R. § 1.925, Garmin International, Inc.'s request for extension of the waiver filed on August 6, 2008, IS GRANTED, and the waiver granted to Garmin International, Inc. on December 29, 2006 IS EXTENDED until December 29, 2010, under the same terms and conditions as the initial waiver.

11. This action is taken under delegated authority pursuant to Sections 0.131 and 0.331 of the Commission's Rules, 47 C.F.R. §§ 0.131, 0.331.

FEDERAL COMMUNICATIONS COMMISSION

Scot Stone  
Deputy Chief, Mobility Division  
Wireless Telecommunications Bureau